

# SENSOR SUPPLY APPARATUS

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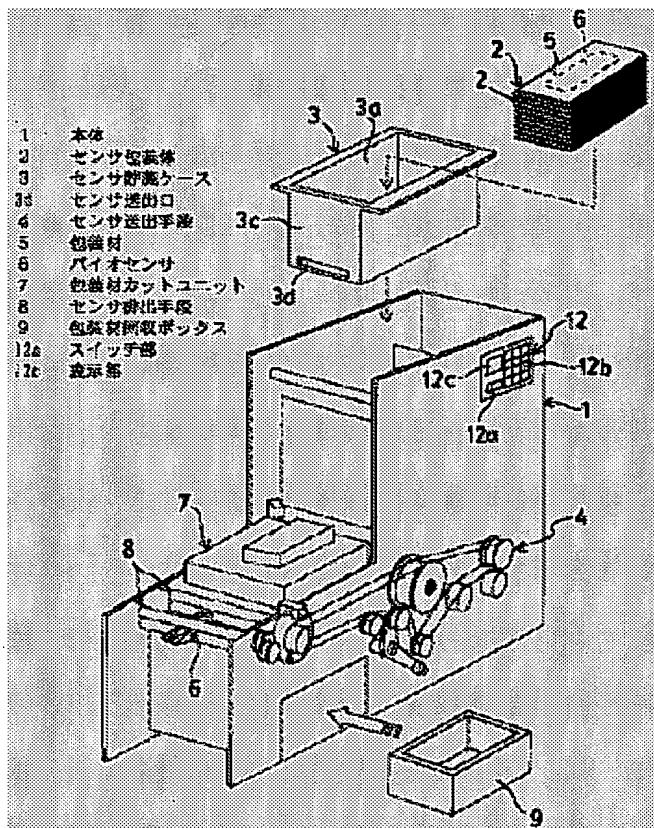
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## Abstract of JP2001141686

**PROBLEM TO BE SOLVED:** To provide a sensor supply apparatus which can supply sensors such as biosensors or the like in a state to be surely and easily mountable to a measuring apparatus. **SOLUTION:** The apparatus includes a sensor storage case 3 with a sensor send opening 3d in which a plurality of biosensors 6 sealed in packaging materials 5 are stored, and a sensor send means 4 and a sensor discharge means 8 for sending out the biosensors 6 in the sensor storage case 3 through the sensor send opening 3d and discharging the sensors at a predetermined sensor discharge position so that a sensor mount end to the measuring apparatus comes first. The biosensors 6 are always sent out one by one at the same sensor discharge position by the same angle in a direction from the mount ends to the measuring apparatus. The sensors can be surely mounted to the measuring apparatus in a proper orientation.



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[Claims]

[Claim 1] A sensor supply apparatus for supplying a sensor for measuring characteristics of an object to a measuring apparatus comprising:

    a sensor storage case with a sensor send opening for storing a plurality of sensors therein, and

    a sensor discharge means for sending out the sensors in the sensor storage case through the sensor send opening and discharging the sensors at a predetermined sensor discharge position so that a sensor mount end to the measuring apparatus comes first.

[Claim 2] The sensor supply apparatus according to claim 1, comprising a measuring apparatus guide means with a guide plane for guiding a movable sensor mount part of the measuring apparatus to a sensor discharge position.

[Claim 3] The sensor supply apparatus according to claim 1, comprising a sensor guide means with a guide plane for guiding sensors sent out from the sensor storage case to a sensor discharge position.

[Claim 4] The sensor supply apparatus according to claim 1, wherein within a sensor storage case are provided a roller firming a part of the sensor discharge means which is rotatable in the direction of going toward a sensor drawing opening by sliding against a side face of the sensor and an elastic member for pressing the sensor toward the roller.

[Claim 5] The sensor supply apparatus according to claim 1, a sensor drawing opening for cutting a package material for the sensor individually packaged with a film-like package material in the middle of a discharge path from the sensor storage case to the sensor discharge position and drawing out the sensor.

[Claim 6] The sensor supply apparatus according to claim 5, comprising a package material removal means for removing the package material remaining in the sensor drawing means.

[Claim 7] The sensor supply apparatus according to claim 1, wherein a drying agent is arranged in the sensor storage case.

[Claim 8] The sensor supply apparatus according to claim 1, comprising a display means for storing the number of sensors mounted to the sensor storage case, performing subtraction each time the sensor is discharged by the sensor discharge means and displaying the calculation result as the number of stocks.

[Claim 9] The sensor supply apparatus according to claim 1, the sensors are disposable sensors for measuring blood sugar.

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As shown Fig. 3, in the sensor storage case 3, an elastic member such

as a spring 13 for pressing the sensor package member 2 downwards is attached to a cover part 3b covering the upper loading opening 3a, a sensor drawing opening 3d is formed on the lowermost of a side wall 3c opposed to the package material cut unit 7 and the sensor send opening 3e is formed on the bottom. A pair of a sensor send roller 4a and a sensor handling roller 4b that form the sensor send means 4 are arranged along the sensor drawing opening 3d in upper and lower stages so as to be rotatable in the opposite directions to each other, and the sensor send roller 4c is arranged so as to enter into the upper edge of the sensors send opening 3e. A drying agent box 14 that fills a drying agent for keeping inside of the case in a dry state therein is attached to the inner face of the sensor storage case 3.